

## ***Fresno Asthmatic Children's Environment Study (F.A.C.E.S.)***

The Fresno Asthmatic Children's Environment Study, which began in 2000, is a large epidemiological study of the effects of air pollution on children with asthma. About 300 asthmatic children who reside in the Fresno area of the Central Valley of California will be enrolled in the study. The overall goal of this study is to determine the effects of different components of particulate matter (PM), in combination with other ambient air pollutants, on the natural history of asthma in young children. The study is sponsored by the California Air Resources Board and conducted by investigators at the University of California, Berkeley.

### **Importance of the Fresno Asthmatic Children's Environment Study**

- ◆ The information provided by the study will help the Air Resources Board (ARB) protect public health. The ARB sets California's ambient air quality standards to protect people who are most sensitive to air pollution.
- ◆ Children may be more strongly affected by air pollution because their lungs and bodies are still developing. Understanding the effects of air pollution on children with asthma is essential for setting health standards protective of sensitive populations.

### **The Pollutants Studied**

- ◆ Particulate matter
- ◆ Criteria air pollutants: NO<sub>x</sub>, SO<sub>2</sub>, CO, ozone
- ◆ Polycyclic Aromatic Hydrocarbons (PAHs)
- ◆ Volatile Organic Compounds (VOCs)
- ◆ Environmental Tobacco Smoke
- ◆ Allergens

### **The Information Gathered by the Study**

The study consists of a variety of measurements taken over the course of five years. Measurements taken include skin testing for allergies, lung function testing, and extensive questions about the child's health and home environment. Research staff will also visit the child's home to collect indoor air and dust samples. Children will keep a journal of activities and time spent in different locations throughout the day, as well as symptoms and medication use. Portable spirometers will be used to measure lung function at home.

### **For More Information**

Please contact the ARB's Public Information Office at (916) 322-2990, or visit our web site at <http://www.arb.ca.gov/research/faces/faces.htm>. You may obtain this document in an alternative format by contacting our ADA coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento area only); or (800) 700-8326 (TDD, outside Sacramento).